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DALY, CROWLEY, MOFFORD & DURKEE, LLP SUITE 301A 354A TURNPIKE STREET CANTON, MA 02021-2714			WOZNIAK, JAMES S	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,278

Applicant(s)

PRINGLE, LEWIS G.

Examiner

James S. Wozniak

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/23/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the office action from 4/28/2005, the applicant has submitted an amendment, filed 5/23/2005, amending Claims 1, 12, 33, 41, and 53, while arguing to traverse the art rejection based on the limitation regarding sending and receiving translation data using a distributed object protocol (*Amendment, Page 14*). The applicant's arguments have been fully considered but are moot with respect to the new grounds of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-4, 6-9, 12, 15-22, 33-36, 38, 41-47, 49, 51-57, and 59-62** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al (*U.S. Patent: 5,884,246*) in view of Zajac et al ("*An Open Distributed Architecture for Reuse and Integration of Heterogeneous NLP Components*," 1997).

With respect to **Claim 1**, Boucher discloses:

A client for sending a translation request, the translation request comprising text to be translated, the client also for receiving a response to the request corresponding to a translation of the text from a first natural language to a second natural language and a translation engine for receiving the translation request and for generating the response and sending the response to the client (*Col. 10, Lines 54-61; and Fig. 2D*).

Although Boucher notes the importance of platform independent processing in a distributed translation application (*Col. 13, Line 55- Col. 14, Line 15*), Boucher does not specifically disclose the use of distributed object protocol for sending translation data between client and server systems, Zajac teaches an application program interface defined using Corba standards for use with a distributed machine translation system (*Section 3, Page 247*).

Boucher and Zajac are analogous art because they are from a similar field of endeavor in natural language translation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher with the application program interface using the Corba standard as taught by Zajac in order to increase translation process compatibility by providing an interface for server and client systems that utilize programs written in different programming languages (*Zajac, Page 246*) and expand translation capabilities by further adding the ability to integrate multiple translation engines (*Zajac, Section 5, Page 251*).

With respect to **Claim 2**, Zajac further teaches an API defined by an IDL (*Section 3.1, Pages 248-249*).

With respect to **Claim 3**, Boucher in view of Zajac teaches the network-based natural language translation system, as applied to Claim 1. Boucher in view of Zajac does not specifically suggest that the distributed object protocol operates in accordance with the COM

standard, however, the examiner takes official notice that the COM standard is well known in the art for use in distributed object systems. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to operate the distributed object protocol taught by Clawson according to the well known and commonly used COM standard in order to increase system compatibility. Furthermore Kleinman suggests the use of other distributed object standards (*Col. 6, Lines 36-45*).

With respect to **Claim 4**, Zajac teaches the CORBA standard as applied to Claim 1.

With respect to **Claim 6**, Boucher teaches a translation system at a server and a client computer for making a translation request (*Col. 2, Line 50- Col. 3, Line 28*).

With respect to **Claims 7-9**, Boucher teaches system implementation over the Internet, the World Wide Web, or LANs (*Col. 5, Line 34- Col. 6, Line 9*).

With respect to **Claim 12**, Boucher further teaches translation options (*Col. 13, Lines 41-53*).

With respect to **Claim 15**, Boucher teaches a user interface (*Col. 13, Line 41- Col. 14, Line 15*).

With respect to **Claim 16**, Zajac further teaches a client API (Page 248) and component APIs (Page 250).

With respect to **Claim 17**, Zajac further teaches a distributed architecture utilizing Corba that supports multiple machine translators (*Section 5, Page 251*).

With respect to **Claim 18**, Boucher in view of Zajac teaches the translation system having an API defined by an IDL, while Boucher additionally teaches a translation site domain name (*Col. 6, Lines 46-57*).

With respect to **Claim 19**, Boucher further teaches a translation website indicated in a domain name that is available with a translation engine (*Col. 8, Line 52- Col. 9, Line 13*).

With respect to **Claim 20**, Boucher further teaches the ability to search for a selective translation type relating to a specific field along with the domain name (*Col. 13, Line 41- Col. 14, Line 67*).

With respect to **Claims 21 and 22**, Boucher in view of Zajac teaches the translation system having an API defined by an IDL, while Boucher additionally teaches translation preferences (*Col. 13, Lines 41-54*).

Claim 33 contains subject matter similar to Claim 1, and thus, is rejected for the same reasons.

Claim 34 contains subject matter similar to Claim 2, and thus, is rejected for the same reasons.

Claim 35 contains subject matter similar to Claim 18, and thus, is rejected for the same reasons.

Claim 36 contains subject matter similar to Claim 21, and thus, is rejected for the same reasons.

With respect to **Claim 38**, Boucher in view of Zajac teaches the network-based natural language translation system utilizing a distributed object protocol, as applied to Claim 33. Boucher in view of Zajac does not specifically suggest scanning a translation request for a spelling error before translation; however, the examiner takes official notice that it is well known in the art to detect and correct spelling errors before any text based searching operation is performed in order to ensure searching accuracy. Therefore, it would have been obvious to one

of ordinary skill in the art, at the time of invention, to detect the presence of spelling errors for correction before translation in order to increase accuracy in searching for a second language equivalent of an input text.

With respect to **Claim 41**, Boucher discloses:

A client for sending a translation request, the translation request comprising text to be translated, the client also for receiving a response to the request corresponding to a translation of the text from a first natural language to a second natural language and a translation engine for receiving the translation request and for generating the response and sending the response to the client (*Col. 10, Lines 54-61; Col. 13, Lines 41-53; and Fig. 2D*).

Boucher also teaches the use of multiple translation machines (*Col. 12, Line 40- Col. 13, Line 2*).

Although Boucher notes the importance of platform independent processing in a distributed translation application (*Col. 13, Line 55- Col. 14, Line 15*), Boucher does not specifically disclose the use of distributed object protocol for sending translation data between client and server systems, Zajac teaches an application program interface defined using Corba standards for use with a distributed machine translation system (*Section 3, Page 247*).

Boucher and Zajac are analogous art because they are from a similar field of endeavor in natural language translation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher with the application program interface using the Corba standard as taught by Zajac in order to increase translation process compatibility by providing an interface for server and client systems that utilize programs written

in different programming languages (*Zajac, Page 246*) and expand translation capabilities by further adding the ability to integrate multiple translation engines (*Zajac, Section 5, Page 251*).

Claim 42 contains subject matter similar to Claim 2, and thus is rejected for the same reasons.

Claim 43 contains subject matter similar to Claim 18, and thus is rejected for the same reasons.

Claim 44 contains subject matter similar to Claim 15, and thus is rejected for the same reasons.

Claim 45 contains subject matter similar to Claim 3, and thus is rejected for the same reasons.

Claim 46 contains subject matter similar to Claim 4, and thus is rejected for the same reasons.

Claim 47 contains subject matter similar to Claim 22, and thus is rejected for the same reasons.

With respect to **Claim 49**, Boucher further teaches generating a plurality of secondary translations (*Col. 12, Line 40- Col. 13, Line 2*).

Claim 51 contains subject matter similar to Claim 6, and thus is rejected for the same reasons.

With respect to **Claim 52**, Boucher in view of Zajac teaches the network-based natural language translation system utilizing distributed object protocol, as applied to Claim 41.

Boucher in view of Zajac does not specifically suggest the use of a proxy server for translation engine communication, however, the examiner takes official notice that it is well known in the

art to use a proxy server in a service-related internet application so that only registered users can access the service. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to utilize a proxy server in a network-based translation system in order to allow only registered users to access a translation service.

With respect to **Claim 53**, Boucher discloses:

A client for sending a translation request, the translation request comprising text to be translated, the client also for receiving a response to the request corresponding to a translation of the text from a first natural language to a second natural language and a translation engine for receiving the translation request and for generating the response and sending the response to the client (*Col. 10, Lines 54-61; Col. 13, Lines 41-53; and Fig. 2D*).

Boucher also teaches multiple clients for sending a translation request (*Figs. 2A and 2B*).

Although Boucher notes the importance of platform independent processing in a distributed translation application (*Col. 13, Line 55- Col. 14, Line 15*), Boucher does not specifically disclose the use of distributed object protocol for sending translation data between client and server systems, Zajac teaches an application program interface defined using Corba standards for use with a distributed machine translation system (*Section 3, Page 247*).

Boucher and Zajac are analogous art because they are from a similar field of endeavor in natural language translation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher with the application program interface using the Corba standard as taught by Zajac in order to increase translation process compatibility by providing an interface for server and client systems that utilize programs written

in different programming languages (*Zajac, Page 246*) and expand translation capabilities by further adding the ability to integrate multiple translation engines (*Zajac, Section 5, Page 251*).

Claim 54-56 contain subject matter similar to Claim 2-4, respectively, and thus are rejected for the same reasons.

Claim 57 contains subject matter similar to Claim 15, and thus is rejected for the same reasons.

Claim 59 contains subject matter similar to Claim 6, and thus is rejected for the same reasons.

Claim 60 contains subject matter similar to Claim 9, and thus is rejected for the same reasons.

Claims 61 and 62 contain subject matter similar to Claims 21 and 22, and thus, are rejected for the same reasons.

4. **Claims 5, 23-24, 50, and 58** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al in view of Zajac et al, and further in view of Trudeau (U.S. Patent: 5,987,401).

With respect to **Claim 5**, Boucher in view of Zajac teaches the network-based natural language translation system, as applied to Claim 1. Boucher in view of Zajac does not specifically suggest the use of a translator at a client device, however Trudeau teaches such an implementation (*Col. 6, Line 50- Col. 7, Line 21*).

Boucher, Zajac, and Trudeau are analogous art because they are from a similar field of endeavor in network-based text translation applications. Thus, it would have been obvious to a

person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher in view of Zajac with the use of a translator at a client device as taught by Trudeau in order to instantly provide real-time translation for incoming and outgoing text messages so that a multilingual conversation can occur in real-time (*Trudeau, Col. 6, Lines 50-60*).

With respect to **Claim 23**, Boucher in view of Zajac teaches the network-based natural language translation system utilizing distributed object protocol and an IDL, as applied to Claim 2. Boucher in view of Zajac does not specifically suggest the use of a synchronous translator, however Trudeau recites such a translator (*Col. 3, Lines 53-65*).

Boucher, Zajac, and Trudeau are analogous art because they are from a similar field of endeavor in network-based text translation applications. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher in view of Zajac with the real-time text translator as taught by Trudeau in order to increase system usability by allowing two users that speak different languages to seamlessly converse through a real-time translation system (*Trudeau, Col. 1, Lines 44-47*).

With respect to **Claim 24**, Trudeau teaches that the real-time translation method applied to Claim 23 is implemented using computer code.

Claims 50 and 58 contain subject matter similar to Claim 5, and thus are rejected for the same reasons.

5. **Claims 10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al in view of Zajac et al, and further in view of Clawson (*U.S. Patent: 6,112,304*).

With respect to **Claims 10 and 11**, Boucher in view of Zajac teaches the network-based natural language translation system, as applied to Claim 1. Boucher in view of Zajac does not specifically suggest the use of a Unicode character set that includes characters used in a plurality of natural languages, however Clawson teaches text representation using Unicode (*Col. 21, Lines 35-54*).

Boucher and Zajac are analogous art because they are from a similar field of endeavor in natural language translation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher in view of Zajac with the use of Unicode for text representation as taught by Clawson in order to improve translation compatibility by facilitating languages such as Japanese, which utilize multiple character sets (*Clawson, Col. 21, Lines 35-54*).

6. **Claims 13, 37, and 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al in view of Zajac et al, and further in view of Hiroya et al (*U.S. Patent: 5,751,957*).

With respect to **Claim 13**, Boucher in view of Zajac teaches the network-based natural language translation system, as applied to Claim 1. Boucher in view of Zajac does not specifically suggest the use of a translation error notification mechanism, however Hiroya teaches such a mechanism (*Col. 9, Line 55- Col. 10, Line 21*).

Boucher, Zajac, and Hiroya are analogous art because they are from a similar field of endeavor in network-based text translation applications. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher in

view of Zajac with the error notification means taught by Hiroya in order to make the user aware that a proper translation cannot be performed (*Hiroya, Col. 9, Line 55- Col. 10, Line 21*).

Claim 37 contains subject matter similar to Claim 13, and thus, is rejected for the same reasons.

With respect to **Claim 48**, Hiroya further recites informing a user if a translation means is unavailable (*error message generated when a translation rule is unavailable, Col. 9, Line 55- Col. 10, Line 22*).

7. **Claims 14 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al in view of Zajac et al, further in view of Hiroya et al (*U.S. Patent: 5,751,957*), and yet further in view of Kleinman et al (*U.S. Patent: 5,724,503*).

With respect to **Claim 14**, Boucher in view of Zajac, and further in view of Hiroya teaches the network-based natural language translation system having a means to notify a user of a translation error, as applied to Claim 13. Boucher in view of Zajac, and further in view of Hiroya does not teach that the error callback interface is defined by an IDL, however, Kleinman recites:

The error callback interface is defined by an IDL (*error notification through IDL, Col. 8, Line 26- Col. 9, Line 21*).

Boucher, Zajac, Hiroya, and Kleinman are analogous art because they are from a similar field of endeavor in text processing utilizing distributed computing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher in view of Zajac, and further in view of Hiroya with the use of IDL in providing error

notification as taught by Kleinman to implement a means for providing a user with a error message readable at a client computer (*Kleinman, Col. 4, Lines 15-33*).

Claim 40 contains subject matter similar to Claim 14, and thus, is rejected for the same reasons.

8. **Claims 25-28 and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al in view of Zajac et al, and yet further in view of Murata et al (*U.S. Patent: 5,987,402*).

With respect to **Claim 25**, Boucher in view of Zajac teaches the network-based natural language translation system utilizing distributed object protocol and an IDL, as applied to Claim 2. Boucher in view of Zajac does not specifically suggest the use of an asynchronous translator, however Murata recites:

An asynchronous translator for providing the client with a response to a translation request while the client is performing other actions (*user ability to receive a partial translation while viewing an original version of a document to be translated, Col. 10, Line 66- Col. 11, Line 18, and Fig. 10*).

Boucher, Zajac, and Murata are analogous art because they are from a similar field of endeavor in network-based text processing applications. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher in view of Zajac with the means of providing a partial translation that allows a user to access an original document while waiting for the translation to complete as taught by Murata to allow a user to analyze a partial translation before requesting a complete translation of a document (Col.

2, Lines 22-29) and determine that original and translated documents are consistent (Col. 2, Lines 58-59).

With respect to **Claims 26 and 27**, Murata further teaches determining and transmitting an in-progress translation of a selected document (*Col. 10, Line 54- Col. 11, Line 18, and Fig. 10*).

With respect to **Claim 28**, Murata teaches the determination and transmission of an in-progress translation as applied to Claims 26 and 27, while Boucher in view of Zajac teaches the network-based natural language translation system utilizing distributed object protocol and an IDL, as applied to Claim 2.

Claim 39 contains subject matter similar to Claims 26 and 27, and thus, is rejected for the same reasons.

9. **Claims 29-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al in view of Zajac et al, and further in view of Kuno et al (*U.S. Patent: 5,528,491*).

With respect to **Claims 29 and 30**, Boucher in view of Zajac teaches the network-based translation system having a translation server utilizing distributed object protocol and an IDL, as applied to Claim 2. Boucher in view of Zajac does not teach an alternate word or sentence locator, however, Kuno discloses:

Locating at least one alternate word or sentence choice in response to a request from the client (*alternate translation request, Col. 3, Lines 53-55, which can consist of alternate words and sentences, as is well known in the art and evidenced in Col. 1, Lines 9-22*).

Boucher, Zajac, and Kuno are analogous art because they are from a similar field of endeavor in text processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher in view of Zajac with the method of providing an alternate translation request comprising alternate words and sentences as taught by Kuno to allow a user to select a preferred translation format in a situation where several translation formats are available (*Col. 1, Lines 9-22*).

With respect to **Claims 31 and 32**, Boucher in view of Zajac teaches the network-based translation system having a translation server utilizing distributed object protocol and an IDL, as applied to Claim 2. Boucher in view of Zajac does not teach text parsing that includes sentence end determination and part-of-speech registration, however Kuno recites:

Sentence end determination (*Col. 4, Lines 5-13*) and part-of-speech registration (*Col. 5, Line 45- Col. 6, Line 7*).

Boucher, Zajac, and Kuno are analogous art because they are from a similar field of endeavor in text processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Boucher in view of Zajac with the method of text parsing that includes sentence end determination and part-of-speech registration as taught by Kuno to increase translation accuracy by properly identifying word and sentence boundaries (*Col. 2, Lines 17-20*).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Weisweber ("*Open Distributed Machine Translation*," 1998)- teaches a method for performing a machine translation using a distributed object protocol.

Jones et al (*U.S. Patent: 6,216,173*)- teaches the use of CORBA and COM in a language translation application.

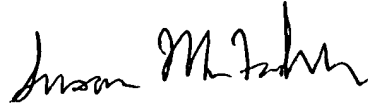
Titmuss et al (*U.S. Patent: 6,397,040*)- teaches the use of CORBA in the translation of human languages.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632 and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached at (571) 272-7582. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

James S. Wozniak
6/14/2005


SUSAN MCFADDEN
PRIMARY EXAMINER